

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,807	04/01/2004	Masato Hayashi	042320	5316
38834 75	590 12/13/2006		EXAMINER	
WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP			RHEE, JANE J	
1250 CONNEC SUITE 700	CTICUT AVENUE, NW		ART UNIT	PAPER NUMBER
WASHINGTO	N, DC 20036		1745	-
•		•	DATE MAIL ED: 12/13/2006	6

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	<del></del> .
	10/814,807	HAYASHI ET AL.	
Office Action Summary	Examiner	Art Unit	
	Jane Rhee	1745	
The MAILING DATE of this communication Period for Reply			,
A SHORTENED STATUTORY PERIOD FOR RI WHICHEVER IS LONGER, FROM THE MAILIN  - Extensions of time may be available under the provisions of 37 Cl after SIX (6) MONTHS from the mailing date of this communicatio  - If NO period for reply is specified above, the maximum statutory p  - Failure to reply within the set or extended period for reply will, by a Any reply received by the Office later than three months after the earned patent term adjustment. See 37 CFR 1.704(b).	G DATE OF THIS COMMUN FR 1.136(a). In no event, however, may and n. eriod will apply and will expire SIX (6) MO statute, cause the application to become	IICATION. a reply be timely filed  ONTHS from the mailing date of this communication ABANDONED (35 U.S.C. § 133).	
Status			
<ul> <li>1) Responsive to communication(s) filed on 2</li> <li>2a) This action is FINAL. 2b)</li> <li>3) Since this application is in condition for all closed in accordance with the practice under the condition of the condition</li></ul>	This action is non-final. owance except for formal ma	•	is .
	del Ex parte Quaylo, 1000 O.	D. 11, 400 O.O. 210.	
Disposition of Claims  4) ☐ Claim(s) 1-5 is/are pending in the applicat 4a) Of the above claim(s) 4-5 is/are withdress  5) ☐ Claim(s) is/are allowed.  6) ☐ Claim(s) 1-3 is/are rejected.  7) ☐ Claim(s) is/are objected to.  8) ☐ Claim(s) are subject to restriction a	awn from consideration.		
Application Papers	·	•	
9) The specification is objected to by the Examination The drawing(s) filed on is/are: a) Applicant may not request that any objection to Replacement drawing sheet(s) including the control of the oath or declaration is objected to by the	accepted or b) objected to the drawing(s) be held in abey prection is required if the drawing	ance. See 37 CFR 1.85(a).  g(s) is objected to. See 37 CFR 1.121	(d).
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for for a) All b) Some * c) None of:  1. Certified copies of the priority docur 2. Certified copies of the priority docur 3. Copies of the certified copies of the application from the International But * See the attached detailed Office action for a	nents have been received. nents have been received in priority documents have bee ureau (PCT Rule 17.2(a)).	Application No In received in this National Stage	
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948  3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	Paper No	v Summary (PTO-413) o(s)/Mail Date Informal Patent Application	

Art Unit: 1745

### **DETAILED ACTION**

#### Election/Restrictions

1. Claims 4-5 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected method there being no allowable generic or linking claim. Election was made without traverse in the reply filed on 9/21/2006.

## Rejection Repeated

## ·Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nowobilski et al. (4726974) in view of Rusek Jr. et al. (5591505).

As to claim 1, Nowoilski et al. discloses a vacuum heat insulating material comprising a core material (figure 1 number 3) and a gas absorbent (col. 3 lines 33-37) a bag made from a gas barrier film housing the core material and the gas absorbent (col. 2 line 2-3) wherein the interior of the bag has a reduced pressure and the bag is air-tightly sealed (col. 3 lines 65-68), wherein the core material is a molded product obtained by coating a resin binder on inorganic fibers (col. 3 lines 3-12) having a average fiber diameter of less then 5um (col. 2 lines 46-48) which reads on applicant's claimed range of 3-5um. As to claim 2, Nowoilski et al. discloses that the inorganic

Art Unit: 1745

fibers are glass fibers (col. 1 line 65). As to claim 3, Nowoilski et al. discloses that the binder is phenolic type binder (col. 3 line 4).

Nowoilski et al. fail to disclose binder coating amount in the range of 0.5 to 1.5wt%. Rusek Jr. et al. teaches a fibrous insulation product that comprises a collection of fiberous material having a binder dispersed throughout the fibrous material (col. 2 lines 9-11). Rusek Jr et al. teaches 0.1% to about 7 % by weight of binder based on the weight of glass in the insulation product (col. 5 lines 23-24) which is within applicant's claimed range of 0.5-1.5wt% for the purpose of providing an insulation product that is ideally suited for use in high temperature, low smoke, odorless evacuated atmosphere and building insulation applications.

Therefore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide 0.1% to about 7 % by weight of binder based on the weight of glass in the insulation product in order to provide an insulation product that is ideally suited for use in high temperature, low smoke, odorless evacuated atmosphere and building insulation applications.

As to applying heat pressing the inorganic fibers, or a laminate fabricated by stacking two or more sheets of the molded product is a product by process limitation. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985).

## Response to Arguments

Art Unit: 1745

3. Applicant's arguments filed 9/21/2006 have been fully considered but they are not persuasive.

In response to applicant's argument that Rusek Jr et al. teches away from using organic binder materials, thus Nowobilski cannot be combined with Rusek Jr. et al., Nowobilski discloses that an organic or an inorganic binder can be used to hold together the fiberglass fibers. Therefore, since Nowobilski teaches that inorganic binders can be used, Rusek Jr et al. does not teach away for discloses inorganic binder amounts.

### Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jane Rhee whose telephone number is 571-272-1499. The examiner can normally be reached on M-F 9-6.

Art Unit: 1745

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jane Rhee

November 28,2006

PATRICK JOSEPH RYAN SUPERVISORY PATENT EXAMINER